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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,929

05/04/2005

Keisuke Ohnishi

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05/22/2007

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EXAMINER

ZANELLI, MICHAEL J

ART UNIT

PAPER NUMBER

3661

MAIL DATE

DELIVERY MODE

05/22/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/533,929

Applicant(s)

OHNISHI ET AL.

Examiner

Michael J. Zanelli

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,5,7,11-14,17 and 19-25 is/are rejected.
- 7) ☒ Claim(s) 1,3,4,6,8-10,15,16 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/4/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The preliminary amendment filed 5/4/05 has been entered. Claims 1-25 are pending.
2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
3. The IDS filed 5/4/05 has been considered.
4. Figures 9 and 10 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated (see Brief Description of the Drawings). See MPEP § 608.02(g).

Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claim appears to repeat subject matter already contained in base claim 3. The claim should only include that subject matter which is further limiting the base claim.
6. Claims 1-25 are objected to because of the following informalities:
 - A. As per claims 1, 2, 3, 5, 6 and 7, the claims refer to "the current position ai"; however, this variable has not been previously established. Taking claim 1 as exemplary,

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the examiner suggests inserting --ai-- after “the current position” at line 5. Note claim 6 uses the variable “a1” instead of “ai”, but the same type of correction is required.

B. All claims depending from an objected base claim are also objected to as containing the same deficiencies.

7. Claims 2, 5, 7, 11-14, 17 and 19-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. As per claim 2, “the direction angle A_i ” (line 14) and “the reference angle A” (line 15) lack antecedence.

B. As per claim 5, “the corrected position” (line 22) lacks antecedence.

C. As per claim 7, “the tolerance angle γ ” (line 18) and “the corrected position” (line 23) lack antecedence.

D. As per claims 11 and 20-25, “the pedestrian navigation devices” lacks antecedence. Note that each of the independent claims refers to only one pedestrian navigation device. Further the claims are unclear as to what is meant by “the functions of the pedestrian navigation devices”. The examiner suggests changing “functions” to --means-- to avoid ambiguity.

E. All claims depending from a rejected base claim are also rejected as containing the same deficiencies.

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 11 and 20-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 11 and 20-25 are directed to a computer program without a computer-readable medium necessary for imparting the computer program's functionality.

Computer programs in and of themselves do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. Such computer programs constitute functional descriptive material which is nonstatutory. See MPEP 2106(IV)(B)(1)(a). The examiner suggests rewriting the claims as "A computer readable medium having a computer program product for ...".

10. Claims 1-25, as best interpreted given the deficiencies noted above, are distinguishable over the prior art. The prior art of record does not show or reasonably suggest, in combination with the other claimed subject matter: a pedestrian navigation device including a central processing means for calculating the distance between a reference point a0 and the current position and comparing it to a reference distance to determine how the current position is to be corrected relative to a reference direction (claim 1) or a pedestrian navigation device including a central processing means for determining when the absolute value of the difference between a direction angle and a reference angle is less than or equal to a tolerance angle γ and calculating current position display information for the current position and setting the direction angle as the new reference angle (claim 2) or a pedestrian navigation device including a central processing means for calculating the distance between a reference point a0 and the current position and comparing it to a reference distance to determine how to calculate current position display

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information as well as setting a new reference point and a new reference direction (claim 3) or a pedestrian navigation device including a central processing means having a reference direction indicating the direction of a past movement route and a prescribed tolerance angle γ , taking the current position at the start of navigation to be reference point a_0 , and, upon receiving the current position a_i after a prescribed time from said position information analysis means, calculating the direction $a_0 \rightarrow a_i$ from said reference point a_0 to said current position a_i , and

(a) if the direction $a_0 \rightarrow a_i$ is outside the range of the tolerance angle γ , from the reference direction α , using current position display information calculated using said reference point a_0 without modification; but (b) if the direction $a_0 \rightarrow a_i$ is within the range of the tolerance angle γ from the reference direction α , calculating current position display information using said current position a_i , and moreover taking the corrected position of said current position a_i to be the new reference point, and takes the direction from the previous reference point a_0 to the new reference point a_i to be the new reference direction α (claim 5) or a pedestrian navigation device including a central processing means for correcting the current position a_i in the direction of advance measured by a direction measurement means and calculating current position display information, and in addition taking the corrected position of the current position a_i to be the new reference point (claim 6) or a pedestrian navigation device including a central processing means which takes the current position at the start of navigation to be reference point a_0 , and upon receiving the current position a_i after a prescribed time from said position information analysis means, calculates the direction $a_0 \rightarrow a_i$ from said reference point a_0 to said current position a_i , and (a) if the direction $a_0 \rightarrow a_i$ is outside the range of the tolerance angle γ from said direction of advance measured by said direction measurement means, uses current position display

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information calculated using said reference point a_0 without modification; but


(b) if the direction $a_0 \rightarrow a_i$ is within the range of the tolerance angle γ from said direction of advance measured by said direction measurement means, calculates current position display information using said current position a_i , and in addition takes the corrected position of said current position a_i to be the new reference point (claim 7). Dependent claims 4 and 8-25 are distinguishable for at least the same reasons.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited documents are of general interest.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Zanelli whose telephone number is (571) 272-6969. The examiner can normally be reached on Monday-Thursday 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Michael J. Zanelli
Primary Examiner
Art Unit 3661

/mjz